



MODULE SPECIFICATION

Part 1: Information			
Module Title	Foundation of Business Analytics		
Module Code	UFCFKM-30-2	Level	Level 5
For implementation from	2020-21		
UWE Credit Rating	30	ECTS Credit Rating	15
Faculty	Faculty of Environment & Technology	Field	Computer Science and Creative Technologies
Department	FET Dept of Computer Sci & Creative Tech		
Module type:	Standard		
Pre-requisites	None		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description
<p>Educational Aims: This module aims to introduce students to the major concepts of business analytics (supported by case studies and examples from various industries) and provide them with tools to solve simple business analytics problems. In order to achieve this, one needs to understand the underlying probability theory and statistics. Thus this module also provides a basic knowledge of statistics and probability. It introduces such concepts as random variables and probability distributions, and it covers the basics of statistical analysis and inference.</p> <p>Outline Syllabus: Indicative Content:</p> <p>Exploring Data - descriptive statistics, data visualisation</p> <p>Probability and Modelling Uncertainty</p> <p>Statistical Inference</p> <p>Regression Analysis and Time Series Forecasting</p> <p>Optimisation and Simulation Modelling</p>

STUDENT AND ACADEMIC SERVICES

Introduction to Data Mining

Teaching and Learning Methods: The module is delivered through weekly combined lecture and tutorial sessions. Each session will direct the course and introduce the new ideas and skills required. Then tutorial sessions will enable each student to carry out the study and research exercises described in the associated work-sheet under the guidance of a Tutor.

The teaching material will be made available from Blackboard. A course text is also recommended. Scheduled learning includes lectures and tutorials.

Independent learning includes time engaged with essential reading and assignment preparation and completion.

Part 3: Assessment

Module assessment will be divided into:

Component A – a 2 hour exam that is summative and assesses students' understanding of concepts and techniques together with their ability to apply them

Component B1 – Portfolio of exercises that are both summative and formative, which will be hosted on a online portfolio and personal learning platform (e.g. Pebblepad). These exercises will consist of short descriptions, statistical analysis/calculations, results using appropriate diagrams/graphs and a reflective element. They are designed to test the material covered the lectures and practical sessions.

Component B2 – Group Project involving the investigation of a problem area and the development of a potential solution. Groups (e.g. 3 or 4 students) will be presented with contextual evidence and/or sample datasets as guidance. They will also develop a project proposal as well as a project plan as part of the coursework. The deliverables will consist of documentation for (i) the research into their given topic, (ii) the project proposal and planning, (iii) a report detailing the business analytics techniques used to develop the solution and a presentation to defend their proposed solution during scheduled class time.

The referral coursework will be undertaken on (i) the portfolio of exercises and (ii) an individual basis and will require the student to build upon some aspects of the group work undertaken during the module through the production of a well-integrated and complementary set of deliverables.

First Sit Components	Final Assessment	Element weighting	Description
Written Assignment - Component B		30 %	Group Coursework (max. 3000 words)
Portfolio - Component B		45 %	Portfolio of exercises
Examination (Online) - Component A	✓	25 %	Online Examination 2 hours 24-hour window
Resit Components	Final Assessment	Element weighting	Description
Written Assignment - Component B		75 %	Individual coursework (max 2000 words)
Examination (Online) - Component A	✓	25 %	Online Examination 2 hours 24-hour window

STUDENT AND ACADEMIC SERVICES

Part 4: Teaching and Learning Methods																	
Learning Outcomes	<p>On successful completion of this module students will achieve the following learning outcomes:</p> <table border="1"> <thead> <tr> <th style="text-align: left;">Module Learning Outcomes</th> <th style="text-align: left;">Reference</th> </tr> </thead> <tbody> <tr> <td>Demonstrate an understanding of the core concepts of business analytics</td> <td>MO1</td> </tr> <tr> <td>Demonstrate knowledge and understanding of statistical analysis inference models</td> <td>MO2</td> </tr> <tr> <td>Demonstrate knowledge and understanding of the role of probability in modelling uncertainty</td> <td>MO3</td> </tr> <tr> <td>Identify, perform, and draw conclusions from appropriate statistical analyses of data sets using appropriate tools to solve business problems</td> <td>MO4</td> </tr> <tr> <td>Retrieve, evaluate and communicate information from a range of sources to underpin academic research activities</td> <td>MO5</td> </tr> <tr> <td>Develop a business analytics solution following a project brief and project plan</td> <td>MO6</td> </tr> </tbody> </table>	Module Learning Outcomes	Reference	Demonstrate an understanding of the core concepts of business analytics	MO1	Demonstrate knowledge and understanding of statistical analysis inference models	MO2	Demonstrate knowledge and understanding of the role of probability in modelling uncertainty	MO3	Identify, perform, and draw conclusions from appropriate statistical analyses of data sets using appropriate tools to solve business problems	MO4	Retrieve, evaluate and communicate information from a range of sources to underpin academic research activities	MO5	Develop a business analytics solution following a project brief and project plan	MO6		
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Reading List	<p><i>The reading list for this module can be accessed via the following link:</i></p> <p>https://uwe.rl.talis.com/modules/ufcfkm-30-2.html</p>																

Part 5: Contributes Towards
<p>This module contributes towards the following programmes of study:</p> <p>Business Computing [Sep][FT][Frenchay][3yrs] BSc (Hons) 2019-20</p> <p>Business Computing [Sep][SW][Frenchay][4yrs] BSc (Hons) 2019-20</p> <p>Business Computing {Foundation} [Sep][FT][Frenchay][4yrs] BSc (Hons) 2018-19</p> <p>Business Computing {Foundation} [Sep][SW][Frenchay][5yrs] BSc (Hons) 2018-19</p> <p>Business Computing {Foundation} [Feb][FT][GCET][4yrs] BSc (Hons) 2018-19</p> <p>Business Computing {Foundation} [Oct][FT][GCET][4yrs] BSc (Hons) 2018-19</p>

